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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,481	03/14/2007	Thomas Wigger	125215	7244
27049 7590 05/13/2010 OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850				
EXAMINER				
SELLERS, ROBERT E				
ART UNIT		PAPER NUMBER		
1796				
NOTIFICATION DATE		DELIVERY MODE		
05/13/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/552,481

Applicant(s)

WIGGER, THOMAS

Examiner

ROBERT SELLERS

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-19 is/are pending in the application.
- 4a) Of the above claim(s) 15 and 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-14 and 17-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

1. This application contains claims 15 and 16 drawn to inventions nonelected with traverse in the reply filed on November 23, 2009. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.
2. The obviousness-type double patenting rejection over copending application no. 10/552,482 is rescinded due to the terminal disclaimer filed April 21, 2010.]
3. The rejections involving the Journal of Applied Polymer Sciences article by Lin et al. and PCT Publication No. WO 00/01659 are withdrawn since there is no recitation of the Mannich base prepared from the phenolic compound of formula (I) or (II) from cancelled claim 2 inserted into independent claim 1 via the amendment filed April 21, 2010.

The text of section 103(a) of Title 35, U.S. Code not included in this action can be found in the non-Final rejection filed January 21, 2010.

Claims 1-14 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent No. 6,172498, Ogawa et al. Patent No. 5,075,411 and Golden Patent No. 5,001,193.

The rejections have been restructured in response to the insertion of the Mannich base reactants of cancelled claim 2 into independent claim 1. The rejection is maintained for the reasons of record set forth in the non-Final rejection. The arguments filed April 21, 2010 have been considered but are unpersuasive.

4. The claimed glass transition temperature (T_g) of more than 80°C after curing at between 5°C and 60°C is a conditional limitation upon the curing of the composition and is not required since the claims are directed to the composition itself. Even if considered, the T_g's of the Japanese patent, Ogawa et al. and Golden inherently fall within the claimed range based on formulations equivalent to that claimed containing an epoxy resin and a Mannich base derived from a phenol such as the preferred m-cresol of Ogawa et al. (col. 3, lines 59-60 and col. 6, Referential Example 2, polyamine reaction composition 2) within the claimed phenolic compound of formula (I), formaldehyde and a polyamine curable at room temperature (Ogawa et al., col. 7, lines 12-13) if the curing time is not critical.

5. The two-stage reaction of the Mannich base of claim 4 constitutes a product-by-process claim. According to MPEP § 2113, Product-by-Process Claims: Product-By-Process Claims are not Limited to the Manipulations of the Recited Steps, Only the Structure Implied by the Steps: "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." (*In re Thorpe*, 227 USPQ 964, 966, Federal Circuit 1985).

"[T]he burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product."

(MPEP § 2113, Burden Shifts to the Applicant to Show an Unobvious Difference and In re Marosi, 218 USPQ 289, 292, Federal Circuit 1983).

6. Based on the equivalent m-cresol, formaldehyde and polyamine reactants employed in the preparation of the Mannich bases of the prior art and claims, the Mannich bases of the Japanese patent, Ogawa et al. and Golden inherently produce cured compositions with Tg's within the claimed parameters. The burden of proof shifts to applicant to distinguish the Mannich base produced by the two-step process of claim 4 over those of the references.

7. The evidence set forth in Table 5 on page 15 of the specification is inconclusive since MB10 obtained via a 1-stage reaction utilizes 3,5-xyleneol which is not representative of the closest prior art m-cresol of Ogawa et al. Furthermore, the showings are not commensurate in scope with the claims because the testing of a single 1,2-diaminocyclohexane (DCH, page 12, line 18) does not establish the criticality of the myriad structurally and functionally distinct species of polyamines defined in claim 18. This does not affect the lack of patentability of claim 1 along with claims 3, 6-14 and 17 dependent thereon.

The amendment necessitated the new ground of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL** (MPEP § 706.07(a)). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

(571) 272-1093 (Fax No. (571)-273-8300)
Monday to Friday, 9:30 to 6:00

/Robert Sellers/
Primary Examiner
Division 1796

rs
5/10/2010